

**Abstract:** Methods, medium, and machines which compress, encode, enhance, transmit, decompress and display digital video images in real time. Real time compression is achieved by sub-sampling each frame of a video signal, encoding and filtering the pixel values to codes, and run-length encoding the codes. Real time transmission is achieved due to high levels of effective compression. Real time decompression is achieved by decoding and decompressing the encoded data to display high quality images. High levels of effective compression also reduce the storage space requirement for recorded video.